

## WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

## NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

The average pressure for the month was considerably above the normal at land stations on the west coast of Newfoundland and in eastern Canada, as well as in the Azores, Bermudas, and British Isles; it was slightly lower than usual at St. Johns, Newfoundland, and in the West Indies, while the departures were small on the Atlantic and Gulf coasts of the United States.

The number of days on which fog was observed was apparently somewhat greater than usual over the banks of Newfoundland; fog was also reported frequently over the mid-section of the steamer lanes, but was comparatively rare off the coast of Europe.

With the exception of July, June is ordinarily the quietest month of the year on the North Atlantic, and during the month under discussion the days on which winds of gale force were reported were even less than usual. While a few cyclonic disturbances occurred, they were, as a rule, of limited intensity and extent.

From the 1st to the 4th high pressure with light to moderate winds was the rule over the entire ocean, while fog prevailed over the Grand Banks.

On the 5th and 6th conditions were about the same as far as pressure, wind, and fog were concerned, except that the British S. S. *Hartington*, while in the region between the Azores and the Spanish coast, encountered a northerly gale with barometric readings of over 30 inches. No storm logs from other vessels were received, and craft in the vicinity reported winds with a force of from 4 to 6 at the Greenwich mean noon observations taken on these dates.

Report follows:

June 5, moderate gale, light NE. swell. Overcast with heavy rain at times. June 6, moderate gale, high sea, and NE. swell. Overcast with heavy rain. Position: Greenwich mean noon on the 6th, latitude 42° N., longitude 18° W.

From the 7th to the 10th there ensued another comparatively quiet period, with fog over the Grand Banks.

From the 11th to the 13th there was a fairly well-developed area of low pressure central near St. Johns, Newfoundland. This was practically the only disturbance of any consequence during June and was of limited intensity and extent. Later in the month, however, a few storm-logs were received from vessels in widely scattered localities. On the 12th and 13th comparatively heavy weather prevailed over the region between the 35th and 42d parallels and the 47th and 57th meridians. On the former date one vessel in the middle section of the steamer lanes encountered winds of gale force after the time of Greenwich mean noon observation. Storm-logs follow:

American S. S. *Dallas*:

Gale began on the 11th; wind SW. Lowest barometer 29.88 inches at 11 p. m. on the 11th; wind SW., 6, in latitude 41° 29' N., longitude 50° 42' W. End on the 12th; wind SW. Highest force of wind, 8; steady from the SW. Barometer rising throughout.

British S. S. *Venturia*:

Gale began on the 12th; wind ESE. Lowest barometer 30.05 inches at 10 p. m. on the 12th; wind S., 7, in latitude 50° 11' N., longitude 34° 52' W. End on the 13th; wind SW. Highest force of wind 8, S. by E.; shifts S.-SW.

American S. S. *Independence Hall*:

Gale began on the 12th; wind SW. Lowest barometer 29.97 inches at 6 a. m. on the 12th; wind SW., 7, in latitude 40° 30' N., longitude 49° 20' W. End on the 13th; wind SW. Highest force of wind 8, SW.; steady from SW.

American S. S. *Conness Peak*:

Gale began on the 12th; wind SSW. Lowest barometer 29.83 inches at noon on the 12th; wind SSW., 7, in latitude 38° 31' N., longitude 55° 42' W. End on the 13th; wind SSW. Highest force of wind 8, SSW.; steady from SSW.

From the 14th to the 16th moderate weather was the rule. On the former date fog was observed in mid-ocean. Conditions had not changed materially by the 17th, except that moderate northwesterly gales were reported at Malin Head, Ireland, and also by the British S. S. *Gloria de Larrinaga*, which on that date was about 250 miles west of the coast of Scotland. Storm-log:

Gale began on the 16th; wind W. Lowest barometer 29.90 inches on the 19th; wind NW., in latitude 55° N., longitude 24° 30' W. End on the 20th; wind W. Highest force of wind 9; shifts W.-NW.

On the 19th the American S. S. *Dallas* encountered a moderate westerly gale in the same region, although other vessels near by experienced only light to moderate winds. Storm-log:

Gale began on the 18th; wind NW. Lowest barometer 29.90 inches at 1 p. m. on the 19th; wind W., 6, in latitude 58° 09' N., longitude 17° 01' W. End on the 19th; wind W. Highest force 8; steady from W. Barometer falling throughout.

From the 20th to the 29th, the usual stagnant atmospheric conditions prevailed over practically the entire ocean, and the American S. S. *Tripp* was the only vessel to render a storm-log during that period, as follows:

From noon to midnight on the 23d moderate southerly gale, near latitude 38° N., longitude 63° W. Highest force of wind 8, S.

A rather unusual case of abnormal refraction was reported from the British S. S. *Cadillac* as follows:

June 26 and 27 abnormal refraction observed. Observation at morning and evening twilight (stars) differing from day (sun) observation by from 12 to 17 miles. No appreciable difference between sea and air temperatures, or barometric changes. Greenwich mean noon position on the 26th; latitude 40° 09' N., longitude 64° 25' W.

On the 30th there was apparently a fairly well-developed area of low pressure over the eastern part of the steamer lanes, although not enough observations have been received for an accurate determination of its extent or position. Storm-logs follow:

British S. S. *Bristol City*:

Gale began on the 29th; wind SSW. Lowest barometer 30 inches at 3 a. m. on the 30th; wind W., 8, in latitude 47° 30' N., longitude 33° W. End on the 30th; wind NW. Highest force of wind 8; shifts W.-NW.

American S. S. *St. Paul*:

Gale began on the 30th; wind SW. Lowest barometer 29.80 inches at midnight on the 30th; wind SW., 8, in latitude 48° 19' N., longitude 20° 25' W. End on July 1; wind NW. Highest force of wind 8; shifts SW.-W.-NW.

## NORTH PACIFIC OCEAN.

By WILLIS E. HURD.

It is the usual expression that June is a quiet month over the North Atlantic and the North Pacific Oceans. The reports from the North Atlantic indicate few atmospheric disturbances during June, 1922, and those from the North Pacific, except perhaps from the Far East, are almost equally as assertive of quiet conditions. The chief officer of the Norwegian S. S. *Hanna Nielsen*, bound from Tsingtau, China, to Astoria, Oregon, from May 27 to June 13, thus tersely remarked: "Unusual calm sea and weather, except the days with fog, all the way over."